



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,659	12/04/2003	John LaDuc	509/40743	5848
23646	7590	04/15/2005	EXAMINER	
BARNES & THORNBURG 750-17TH STREET NW SUITE 900 WASHINGTON, DC 20006				TRIEU, VAN THANH
ART UNIT		PAPER NUMBER		
				2636

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/726,659	LADUC ET AL.	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9, 11, 14, 15, 19 and 20 is/are rejected.
- 7) Claim(s) 10,12,13,16-18 and 21 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION***Claim Rejections - 35 USC § 102***

1. Claims 1-9, 11, 14, 15, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,334,654 filed on 16 September 1999.

The applied reference has common inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, the claimed method for determining the configuration of locomotives in a wired distributed power train comprising: determining consists of adjacent locomotives in the train (the WDP 14 and the CCB 10 for controlling of adjacent locomotives over EP train-line 40, see Figs. 1-6, col. 2, lines 43-50, col. 3, lines 54-67, col. 4, lines 1-5 and col. 5, lines 15-33); and the determining one or more sub-consists of adjacent locomotives which are controlled separately from a preceding adjacent locomotive within the consist (each locomotives includes an integrated locomotive computer ILC 29 connected to the CCB 10 for controlling of adjacent locomotives, see Figs. 1-5, col. 2, lines 51-67, col. 3, lines 1-6 and 61-67 and col. 4, lines 1-13); and determining which locomotives have an available wired distributed power controller (the

EP train-line 40, see Figs. 3-5, col. 5, lines 15-35); and the assigning a common consist indicator to all adjacent locomotives of a consist if the consist has at least one available wired distributed power controller and the assigning a common sub-consist indicator to all locomotives of a sub-consist if the sub-consist has at least one available wired distributed power controller (each locomotives includes an WDP 14 connected to ILC 29, event recorder 30 and display 32, see Figs. 1-5, col. 3, lines 61-67, col. 4, lines 1-21 and 58-65, col. 5, lines 63-67 and col. 6, lines 1-2).

Regarding claim 2, the claimed determining the position of cars and locomotives in the train, see col. 7, lines 12-19).

Regarding claims 3-5, the claimed consist and sub-consist indicator is sequentially assigned based on position in the train (the display 32 for displaying position in the train, see col. 4, lines 58-67 and col. 5, lines 1-32).

Regarding claim 6, the claimed determining the sequence of nodes connected to a wire network (the nodes on the neural network, see Figs. 3-5, col. 5, lines 7-47).

Regarding claim 7, all the claimed subject matters are cited in respect to claims 1 and 2 above.

Regarding claims 8 and 9, the claimed sub-consists are determined from the position of one locomotive not controlled by a preceding adjacent locomotive, see col. 5, lines 43-47 and col. 7, lines 12-25.

Regarding claim 11, the claimed determining a first orientation of locomotives as part of the step of determining the position of the cars and locomotives in the train, see col. col. 7, lines 12-27.

Regarding claim 14, the claimed displaying locomotive information including consist and sub-consist locators in order of their position in the train (the display 32, see Figs. 1 and 3-5, col. 4, lines 1-65.

Regarding claim 15, the claimed displaying locomotive information in numerical order of identification number of the locomotive if the position of the locomotive cannot be determined, see col. 4, lines 13-21 and col. 7, lines 12-27.

Regarding claim 19, all the claimed subject matters are cited in respect to claims 1-9 above and including other controllers, such as ECPU 20, IPM 27 and ILC 29, see Figs. 1 and 3-5.

Regarding claim 20, all the claimed subject matters are cited in respect to claims 1 and 5 above.

Conclusion

2. Claims 10, 12, 13, 16-18 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Root et al discloses an integration train brake system including a single brake controller and distribution power system on an electrical network for train brake commands to EP cars. [US 6,648,422]

Nickles et al discloses a method of optimizing train operation including determining conditions of location, track profile and train forces of the train. [US 6,587,764]

Kettle, Jr. discloses a method and apparatus for controlling an electro-pneumatic braking system on a railroad train having electronic brake control equipment and operator display. [US 5,984,427]

Knight discloses a computerized electro-pneumatic braking system including a train monitoring system and a display. [US 5,862,048]

Schmitz et al discloses a train control and monitoring system detecting operation errors in controlled devices in each car. [US 4,774,669]

Art Unit: 2636

Spenk et al discloses a remote locomotive spotter control having a plug in remote unit to control braking and battery power to one or more traction motors for moving the locomotive from an outside location.[US 4,955,304]

4. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.



Van Trieu
Primary Examiner
Date: 4/7/05